



USAID
FROM THE AMERICAN PEOPLE



TROPICAL
FOREST
FOUNDATION

USAID's Public-Private Alliance in Forestry

A History of USAID/TFF Partnership and Accomplishments



USDA Forest Service
INTERNATIONAL PROGRAMS



Mike Bengé, Senior Forestry Advisor (USAID)
USDA Forest Service, International Programs

July 23, 2004

USAID's Public-Private Alliance in Forestry
A History of USAID/TFF Partnership and Accomplishments

On April 22, 2003, Secretary of State Colin Powell announced the "President's Initiative Against Illegal Logging." Conspicuously absent from this initiative is the fact that you cannot stop illegal logging in a country until there is an adequate supply of legal logs harvested from well managed forests. This cannot be accomplished through one- or two-year program funding, but it must be through a sustained investment in order to develop a self-sustaining alliance of partners.

In 1995, USAID's Forestry Team¹ was ahead of the curve and formed a partnership, though USDA Forest Service's International Program division (FS/IP) with the Tropical Forest Foundation (TFF) that is the epitome of the intent of USAID's present Public-Private Alliance program in both intent and funding leverage. TFF was established as a non-profit educational organization that has sought to forge an alliance between the scientific and conservation community and industry to capitalize on the strengths of these groups. TFF's emphasis has been on the demonstration of, and training in, the benefits of adopting Reduced Impact Logging (RIL), an important element of good forest management. TFF's board of directors comprised such luminaries as Dr. Tom Lovejoy, scientist and environmentalist at the Smithsonian Institution, a senior executive of Caterpillar Inc., CEOs of American and Brazilian forest products companies and associations, scientists from universities, as well as representatives of environmental NGOs.²

The focus of TFF was to demonstrate, train and disseminate RIL and responsible and sustainable forest management practices to Brazilian government agencies, private sector logging companies and landowners. It was the thought at the time that destructive logging and subsequent land conversion was rapidly destroying the forests of Brazil, considered by some to be the lungs of the world. Funding for TFF's work comes from Board Members as well as private donations and donor groups. USAID's modest investment has levered large amounts of funds from other sources including other donors, banks, US companies, as well as companies in host-countries. For a relative small investment by USAID, a great amount has been achieved in moving the forestry industry in USAID-assisted as well as other countries toward adopting good forest management practices.

Brazil

The forest product companies associated with TFF envisioned tropical hardwood forest products as a renewable resource and desired to both obtain raw materials from well managed forests but also to propagate the adoption of good forest practices by others. The USAID Forestry Team realized that forest harvesting was going to take place

¹At that time, USAID/G/ENV's Forestry Team was led by Mike Bengé the author of this report, who is presently seconded to USDA Forest Service's International Programs Division.

²See Appendix I for TFF's current Board of Directors

anyway, necessary to supply raw materials for Brazil's economic growth, as well as generating income through job creation, and earning income from exported products; therefore, providing support to TFF was seen as a wise investment in an effort to reduce the rapid rate of depletion of resources and the destruction of tropical forests. Brazil was and still is the largest consumer of tropical wood products, far exceeding exports.

The strategy of the Forestry Team was to work with TFF/Brazil (FFT- *Fundação Floresta Tropical* in Brazil) to build a broader coalition of partners, including USAID/Brazil, and to broaden and increase the scientific integrity of FFT's program. FFT was already working with several local schools, colleges and universities to expand and improve their curriculum to produce graduates with the technical and academic skills that were sorely lacking but necessary to fulfill the needs of the growing forestry industry in order to implement sustainable forest management. USAID Forestry Team provided funding to match FFT with institutions and scientists to conduct the research necessary to scientifically verify assumptions of the benefits of Reduced Impact Logging.

It was also part of the Forestry Team's strategy to lever USAID/Brazil, World Bank Brazil, ITTO, G-7, and other donors, as well as the government of Brazil, to buy into FFT's program. This strategy was successful, and USAID/Brazil soon began providing much of the programmatic funding for FFT, while the Forestry Team provided funding for innovative studies and networking.

It was felt by the Forestry Team that in order to get the forest private sector, governments, donors, and environmental groups to accept and adopt these practices, it was necessary to generate specific scientific evidence through credible research. Thus the Forestry Team coupled FFT with the Center for International Forestry Research (CIFOR), and scientists in the Forest Service and universities to conduct comparable studies (RIL to conventional logging) including the economics of RIL, reduced vulnerability of RIL sites to fire risk, preservation of biodiversity, and incentives and disincentives to the adoption of RIL. Empirical data evidenced that on some sites, RIL compared to conventional logging reduced damage and impact from logging tropical forests by 50%. However, it was felt that until it was proven that RIL is no more costly than conventional logging, this technology would not be readily adopted by the private sector. The study on the economics of RIL was completed³ (as were others), and has been instrumental in convincing ITTO to promote RIL as a key element in their funded programs, and has encouraged other donors and many in the private sector to do likewise. Other Forestry Team funded studies included investigating the disincentives and incentives in the adoption of RIL, silvicultural practices for forest management, as well as the consideration of RIL's effects on biodiversity compared to conventional logging.

As of June 30, 2004, FFT has now provided training to more than 230 private companies and major landowners in RIL (over 1,900 personnel). FFT's training includes not only technicians and foresters, but also personnel from wood products companies, forest

³For example, see T.P.Holmes, et.al. 2000. Financial Costs and Benefits of Reduced-Impact Logging in the Eastern Amazon [www.tropical-forest-foundation.org].

communities, woodworkers groups, equipment operators, as well as decision makers. FFT has also established several decision-makers courses a year for those in government monitoring agencies, extension agencies, research institutions or NGOs making decisions concerning sustainable forest management in the Amazon, executives of forest products companies and land owners. Training this sector has become an important component of FFT's sustainable forest management - RIL training program.

As a result of FFT's work, and USAID funding, the Brazilian government is now mandating that RIL be adopted by all companies in Brazil, and is working with FFT in setting up a permanent Forest Management Training Center to include RIL. The Brazilian government has established a government entity called CENAFLOP tasked to support forest management and training through the Training Center and other sub-centers since the main center will not be able to handle all the demand, nor is it practical to send all woodworkers to the main center for training. Establishing a permanent training center is the most effective means to meeting the demand of providing practical sustainable forest management - RIL training to current and future generations of forestry practitioners in the Amazon.

FFT through the GOB applied for and received a bridging grant from ITTO to fund continued training but, the grant would not kick in before FFT ran out of money. Fortunately, FFT was able to secure a \$50K bridging grant from the World Wildlife Fund (WWF) to tide them over. [WWF is a collaborator with FFT in Peru and TFF in Indonesia.] ITTO does not pay for construction; however, other funding has been secured for construction from the German Government (KfW).

One of the needs identified in FFT's original cost and benefits study was the necessity to prepare an analytical tool that companies and or land owners could use to understand their costs. This is a critical part of changing the concept of logging and wood production from being a predatory system to a system of sustainable forest management. Therefore, Brazil has great interest in the RILSIM software package developed by USAID, FS/IP and FAO. The RILSIM software package was developed to enable logging companies to easily calculate their current costs using conventional logging methods and compare them with estimated costs associated with using RIL under identical conditions. This solution would help them understand how this method might be able to lower costs while reducing environmental impacts (see the following section on RILSIM). FS/IP, USAID/W and USAID/B are funding the translation of the RILSIM software package into Portuguese, and PP-G7 is supporting field tests and workshops in order to put it into practice.

FFT Multipliers

University of Florida (UF) -- With support from the National Science Foundation, the University of Florida (UF) brought students to Brazil for a site visit of FFT's activities in the course of developing an interdisciplinary curriculum to train doctoral students to research the tradeoffs and effectiveness of different kinds of working forests for conservation and development in neotropical regions. This successful collaborative program between UF and FFT has been in place for the past three years. FFT's sites are used for training the students in developing inventory and harvest plans, while simultaneously conducting further onsite social and bioscience studies that will contribute

to the knowledge base while benefiting FFT in its efforts to promote sustainable forestry. UF has joined USAID/Brazil's consortia to search for funds to finance research gaps in sustainable forestry management with FFT as the center of reference.

Central and South America – Eighteen people from 6 different Latin American countries have already attended FFT's RIL/FM (FM - forest management) courses. Most were sponsored by their respective governments. As a result of this initial success, the State Department, through its Office of Environment and Science initiative funding, is putting \$60K toward funding a hands-on RIL training course with FFT at its site in Brazil for one government official and a representative from a practicing logging company from ten countries in Central and South America. This will be followed up with a FFT workshop, together with IUFRO, to explore the applicability of this technology to local conditions in the ten countries.

Peru -- Having collaborated with FFT in its successful activities in Brazil, CIFOR (International Center for Forest Research) invited and funded FFT to come to Peru to conduct scoping missions to identify large logging concessions(ares) and forest communities that would be interested to participate in RIL activities, and then to identify what kind of training was needed. Two concessions were identified, and FFT determined that priority training needs included harvest inventory and planning, directional felling, and safety. CIFOR also provided funding for the two FFT RIL/FM training sessions for the concessionaires that were completed last year.

Bolivia -- USAID/La Paz, through the World Wildlife Fund, is in discussions with FFT about providing funding for additional training and workshops to include guidance on the construction of low-impact roads that will include technical assistance from the Forest Service on road work.

Guyana -- FFT has also conducted two RIL/FM training courses for people from Guyana; the first was for decision makers and the second for the trainers of the future Guyana training center. Funding for the trainees came from USAID, FS/IP, ITTO and the government of Guyana.

Central Africa -- In addition, one student from Ghana attended FFT's training courses, and the managers of the future FM-RIL project in Africa (under the Central African Regional Program for the Environment – CARPE), observed a complete course for foresters, and had additional time to discuss FFT's program in Brazil. These participants were funded by the USAID-funded CARPE project. Beyond the courses and research, FFT's extension work (funded by USAID, USFS, and ITTO & PP-G7) is extremely important as a catalyst to training by reaching a greater audience to explain RIL/FM and also to demystify the concept.

Guyana

Using FFT's success as a model, the seed for the Guyana project was planted by USAID's Forestry Team with a grant to TFF to investigate opportunities in Guyana in establishing a reduced-impact logging program similar to the one in Brazil. Although USAID did not have a Mission in Guyana, a marked increase in deforestation due to destructive logging practices was taking place with little or no concern for sustainable forest management. The intent was to leverage funds from ITTO to launch a RIL demonstration and training program in Guyana. The first objective of the grant was to identify key forest stakeholders in Guyana and obtain their support for RIL training. TFF assumed a leadership role in a RIL workshop held in Guyana in April 1999, at which a steering committee was formed to facilitate the selection of candidates for RIL training in Guyana.

In November 1999, Guyana delegates, including representatives from the Guyana Forestry Commission (GFC), industry members, and others, were sent to the FFT training center in Brazil to participate in two two-week RIL/FM training courses: the first was for decision makers and the second for the trainers of the future Guyana training center. Funding for the trainees came from USAID, FS/IP, ITTO and the government of Guyana. Following the courses, the delegates strongly encouraged the GFC to go forward with a similar program in Guyana. TFF and GFC were successful in obtaining a grant from ITTO.

A \$1.1 million ITTO grant was secured and the GFC in collaboration with TFF and the Guyana Forest Producers Association (FPA) launched a two-year training initiative that promotes reduced-impact logging (RIL) techniques in Guyana. The Forestry Training Centre (FTC) was established as a separate entity by the GFC, TFF, and the FPA. It is intended to make the country's forest industry more competitive while minimizing the impact of timber harvesting. The method of extraction used in reduced impact logging lowers costs, thus giving the technique an economic advantage as well as being environmentally friendly.

Additional funding for the FTC has come from ITTO, the Guyana Forestry Commission, the U.K. Department for International Development, and Caterpillar, Inc. (equipment). Other sponsors include the Forest Products Association of Guyana, Stihl, Macorp, and Farfan & Mendes Ltd. While this is only a two-year project, TFF's plan is to initiate a permanent training program, led the first two years by Project Director Dr. Peter van der Hout and then directed by current Project Coordinator Godfrey Marshall of Guyana. Training will be free for the first two years but a cost may be attached to it afterwards.

The FTC is providing hands-on RIL training to supervisory staff and forest workers of timber companies, students, representatives of hinterland communities, and employees of government agencies. Training is currently taking place at a Barama Co. Ltd. Concession site and will soon be moved to a more permanent site run by Toolsie Persaud Ltd. & Group & Companies.

The FTC will conduct six two-week courses per year, with twelve trainees in each course. The limited number of courses is due to the country's wet season, which is not conducive

to RIL, and will also allow time for preparation of demonstration sites. Aspects of the training will be in accordance with Guyana's code of practice for timber harvesting. Fifteen FTC staff members recently traveled to the Brazilian FFT center for two weeks of hands-on training in planning and conducting a logging operation using RIL principles. FTC staff also received instruction on effective training techniques.

The Guyana-TFF project has peaked the interest of donor organizations in sending personnel from the forest industry in Suriname for RIL training (train the trainers) in Guyana with the intent of creating a similar training program in Suriname. Interest in RIL training has also been expressed by delegations from Belize, Trinidad and Venezuela. Although USAID has a representative in Guyana, it has no environmental program, and USAID has no mission in Suriname. Nevertheless, both of these countries are under serious threat of deforestation. It was the Forestry Team's strategy that a small investment could leverage other donors, keeping USAID on the cutting-edge of forest conservation by being out ahead of the curve.

Indonesia

According to estimates by the Indonesian Government, 80 percent of the logs harvested there come from illegal sources. Due to market forces, however, it is impossible to stop illegal logging unless adequate sources of "legally harvested" logs are available from concessions implementing Best Forest Management Practices (BFMP). Over capacity in the forestry industry, especially pulp and plywood, is also a pressing problem.

Due to the rapid depletion of forest resources because of destructive logging, the Forestry Team felt that there was a valuable role for the Tropical Forest Foundation (TFF) to play in Indonesia, and an activity was funded to initiate a training program there with the goal of using existing concessions as RIL demonstration sites. The Tropical Forest Foundation has been conducting Reduced Impact Logging and sustainable forest management training in Indonesia since 1999. RIL training emphasizes planning, operational control, basic standards, and the adoption of a management regime that allows this approach to function efficiently to achieve two very important goals: (1) Significantly reduce the overall impact of logging (impact on soils, hydrology, and residual trees), and (2) Achieve cost savings through improved efficiency and reduction in waste. Additionally, compared with conventionally logged sites, those where RIL has been used have shown to be less prone to forest fires since the mainly intact canopy reduces the drying of forest floors.

TFF began forging partnerships with the International Center for Forest Research (CIFOR), the Association of Indonesian Forest Concession Holders (APHI), Indonesian Wood Panel Association (APKINDO), Indonesian-based WWF and TNC, Tropical Forest Trust (TFT), South-Central Kalimantan Production Forest Project (SCKPFP - EU), and conducted a number of training courses on elements of RIL and BFMP for a number of concessionaires.

In 2002, the International Tropical Timber Organization (ITTO) approved funding for a project complementary to USAID's Public Private Partnership Alliance initiative to be jointly implemented by TFF and the Government of Indonesia's Center for Forestry

Education and Research (CFET). The objectives of the project are to increase awareness and understanding of RIL implementation techniques, and to build national capacity to implement RIL training.

In 2003, under the Indonesian Public-Private Partnership Alliance initiative, the Asia/Near East Bureau, USAID/Jakarta Mission and FS/IP (20% match of USAID funds) provided funding for TFF to implement a “pilot demonstration project” to identify Indonesian concessionaires that produce legally sourced logs and use Reduced Impact Logging (RIL) and best forest management practices (BFMP), and link them with mills and companies to specific market outlets in the U.S. Presently, Lowes is the principal market outlet in the U.S., and Home Depot is a principal funding partner.

In collaboration with World Wildlife Fund – Indonesia (WWF-I) and The Nature Conservancy – Indonesia (NC-I), TFF set up partnerships with Home Depot and Lowe’s (National Home Center Chains), Alas Kusuma Group-Indonesia, PT Suka Jaya Makmur (SJM - a member of the Alas Kusuma Group), Caterpillar Inc., PT Inexim Utama, Plywood Tropics, USA, Inc., the NGO Smartwood (an independent chain-of-custody auditor that is involved only in log tracking), in an activity to demonstrate that tropical wood products in Indonesia can be legally harvested and tracked from the forest to dockside thru loading onto ships in Indonesia, and through the ships’ manifests tracked to the marketplace – initially the U.S. Smartwood’s participation was especially important in order to set up a system to ensure that the logs are legally sourced and the forest products are tracked from the stump, through the mill, to the dock to ensure legality.

In addition to USAID, FS/IP and Home Depot funding, in-kind support is being provided by Caterpillar (costly skidders and other equipment), the Indonesian conglomerate Alas Kasuma, and Plywood Tropics USA. Recently, Firestone has offered to provide tires that have reduced compaction to TFF and its partners’ operations.

Since the initiation of a tracking system has been in place on one concession, four shipments of plywood (6,000 cubic meters) manufactured from “legally harvested logs,” facilitated by Plywood Tropics USA, Inc., have been delivered to the port in Norfolk, VA. They were successfully tracked from stumps in the forest, through the mill, to its destination in the U.S. The Indonesian concessionaire involved in the project is committed to, and is on track toward employing, best forest management practices (BFMP) through the implementation of reduced impact logging (RIL) practices. Two more concessions have now signed on with TFF to adopt this system.

Most recently, the Government of the Netherlands has approached TFF to provide training for a project, “Certification Support and Market Linking Program,” promoting certification for two Indonesian concessions which have signed trade agreements with Dutch importers. The funding for this training will be provided to TFF through Form International, a Dutch-based forestry training company.

TFF’s activities provide an excellent model for Indonesia, given the country’s deforestation and illegal logging problems. Also, keeping major U.S. markets like Home Depot’s, Lowes’ and others is an added incentive for Indonesian companies to adopt RIL,

log tracking systems and other good forest management practices. (Indonesian concessionaires envision big markets if they adopt good practices). Home Depot and Lowes were going to stop buying wood from Indonesia due to pressure from environmental NGOs, but were persuaded against this action through proposed collaboration with the TFF program. It was important that their presence be maintained as a means to encourage change. If they had stopped buying, then Indonesian wood products would be sold to those with no regard to the legality or sustainability. This was achieved at a very low cost to USAID – **“a real success story.”**

Congo Basin

A diverse set of organizations – the Tropical Forest Foundation, the Wildlife Conservation Society, FORM International, and the United States Forest Service -- have come together to develop and implement a Reduced Impact Logging project (RIL) in the Congo Basin. The purpose of this project is to improve forest management in the Congo Basin through the promotion of RIL techniques to reduce negative environmental impacts from logging operations while maintaining their economic viability. These four organizations are implementing the project because they bring together diverse skills and experiences necessary to successfully implement a RIL/BMP program appropriate to the Congo Basin region. The strengths of each of the partners include: experience in central Africa, credibility with the logging industry, RIL program development experience, a strong network within the forest industry both within central Africa and globally, wildlife management experience in central Africa, and a direct link to the Congo Basin Forest Partnership landscapes.

Very few, if any, training opportunities for improved forest management practices exist in the Congo Basin region. The project is to set the stage for what hopefully can be seen as a training and capacity building project for the region. The RIL project will test different training approaches specific to the needs of the Congo Basin region that can then be replicated to the appropriate forest stakeholders throughout the region.

The project has been developed in two stages:

First Stage:

- Develop and test a full range of RIL courses in the region.
- Demonstrate the opportunities and feasibility of RIL techniques under various conditions through site-specific demonstration areas.
- Build capacity among forest stakeholders at pilot-project level.

Second stage:

- Implement a full range of RIL courses for the region.
- Create awareness and promote the adoption of RIL techniques at a national level.
- Continue to build the capacity of forest stakeholders in the region.

The first-stage of this initiative is funded by a grant from USAID's Global Development Alliance (GDA), and a modest contribution from FS/IP.

RILSIM software

Most logging companies are reluctant to adopt new RIL/FM technologies until they know how this will affect their profit margin. In order to overcome these hurdles, USAID's Forestry Team, FS/IP and their partners, including UN/FAO, set about to develop a software package to enable logging companies to easily calculate their current costs using conventional logging methods and compare them with estimated costs associated with using RIL under identical conditions. This would help logging companies understand how RIL might lower costs while reducing environmental impacts.

Conventional logging practices in the tropics usually involve removal of valuable timber at the expense of the surrounding forest. When trees are felled for extraction, many surrounding trees are often killed or damaged in the process. Also, due to poor tracking, a number of felled trees are lost and left behind in the logging operation. Skid trails are poorly laid out and roads are not built correctly resulting in further environmental damage. Further environmental damage results when logs are extracted without lifting one end of the log by using skidders or hoists. As a result, advocates of sustainable forest management support a more environmentally sound and efficient alternative to such practices --Reduced-Impact Logging (RIL). By using RIL rather than conventional logging practices, environmental damage is estimated to be reduced by as much as 50 percent.

Designed to minimize disturbance associated with selective timber harvest, RIL involves extensive pre-harvest planning by mapping and inventorying trees for present cuts and for sustainable forest management planning. Directional felling greatly reduces damage to adjacent trees and vegetation. Consequently, fewer roads, skid trails and log landings are needed, fewer logs are lost, and there is less erosion and better water quality. Therefore, forests regenerate faster and biodiversity is maintained.

Proponents of RIL claim that these technologies may in fact be more cost-effective, and if used by loggers, they may see an increase in profits with fewer negative environmental impacts. Some site-specific research studies have shown that, if properly implemented, RIL can indeed increase profits.⁴ Other studies indicate that this may not always be the case. Therefore, most logging companies are reluctant to adopt new RIL technologies until they know how RIL will affect their profit margin.

To accomplish this task, a team of international cooperators has been developing and testing Reduced-Impact Logging Simulator (RILSIM) software, for the past two years. RILSIM is based on a series of "data forms" on which users describe local operating conditions, wages, equipment costs, production rates and other relevant factors.

⁴ T.P.Holmes, et.al. *ibid*

Released for distribution in May 2003, the software is available at no cost. The distribution package includes a CD-ROM, which contains the software and which can operate on computers with little memory and disk capacity, and a printed User's Guide. RILSIM is also thoroughly documented, with a comprehensive "context-sensitive" help system designed to guide users through the analysis. The User's Guide covers the principles of reduced-impact logging and provides detailed examples that users can work through to become acquainted with the software. Users are encouraged to provide feedback to the developers so that "bugs" can be worked out, and RILSIM and the RILSIM User's Guide can be updated and refined to produce a more effective analytical tool. Presently, both are in the 2nd edition. ITTO now funds a substantial portion of the RILSIM financial analysis software.

Low-Volume Roads Manual

Roads are unquestionably the most problematic features of timber harvesting operations since a major part of the total soil erosion resulting from timber harvesting operations can be attributed directly to roads, often because of design or construction flaws or poor maintenance practices. In fact, roads can be the source of as much as 90 percent of sediments that pollute waterways, choke rivers, fill reservoirs and have devastating effects on aquatic ecosystems. Yet, they are essential to access forest areas. And better roads help minimize maintenance and transport costs, lengthen the road life and increase transport safety. While the various codes of practice for timber harvesting touch on forest road engineering, they don't really get into the finer details of getting things right. Realizing the above, the Forestry Team, working through FS/IP, began working with Gordon Keller, Geotechnical Engineer assigned to the Forest Service's Plumas National Forest in California, to garner resources and expertise to produce the publication *Low-Volume Roads Engineering Best Management Practices Field Guide*. This publication, available through FS/IP, provides guidance insights into ways and means of building adequate logging and other roads and constructing them in a cost-effective way.

The guide tries to address most basic roads issues in as simple a manner as possible, and includes "do's" and "don'ts" as well as provides relevant design information. It also contains a list of selected references that provide more detailed information for those whom "basic" is not sufficient. Although the guide does not focus on the design and construction of forest or logging roads per se, the basic principles apply and many examples refer to forest roads. At present, this publication is available in hardcopy in English only, accompanied by a CD-ROM in English; however, it is being translated into Spanish, Portuguese and French and will be available on CD-ROM in the near future.

Conclusion

TFF has been in existence since 1990, initiating its pilot-program in Brazil. TFF is now highly regarded world-wide for demonstrating and teaching RIL and good forest

management practices. It's difficult to evaluate the ripple effect of the Forestry Team's funding of TFF's RIL/FM activities or the large amount of funds it has leveraged. However it is known that the government of Brazil, as well as a large number of donors other than USAID (e.g., ITTO), and numerous responsible logging companies have now adopted RIL/FM in its entirety or are using segments of RIL/FM in carrying out their projects, programs or operations.

Additionally, keeping open major U.S. markets like Home Depot's, Lowe's and others is an added incentive for Indonesian companies to adopt RIL, log tracking systems and other good forest management practices. This is a credit to USAID's Indonesian Public-Private Partnership Alliance initiative.

Destructive and/or illegal logging cannot be stopped until there is an adequate supply of legal logs harvested by using environmentally sound practices and from well managed forests. This cannot be accomplished through one- or two-year program funding, but it must be through a sustained investment in order develop a self-sustaining alliance of partners.

Mike Bengé
Senior Forestry Advisor (USAID)
USDA Forest Service
International Programs
1099 14th Street, NW Suite 5500W
Washington, DC 20005
ph (202) 501-3025
fax (202) 273-4750
email: mbenge@fs.fed.us

Public.Private.Partnership.doc/mbenge.files.7/23/04